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Evaluation of Some Effective Factors on Postpartum Anoestrus in Dairy Cattle

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Abstract

The objective of this study was to investigate the effect of some factors on postpartum anoestrus in dairy cows. Anoestrus cows were divided in four groups as inactive ovary, persistent follicle, persistent corpus luteum and ovarian cyst. Blood samples were obtained from 182 lactating cows and serum glucose, urea, total protein, phosphorus and β -hydroxybutyrate were measured by spectrophotometer and blood serum progesterone concentration was measured by ELISA method. Some impressive factors on postpartum anoestrus including calving season, parity, body condition score and milk production were also studied. Effects of calving season, blood serum total protein ($P<0.05$) and blood serum glucose ($P<0.0001$) were significant on animal status. The cows calving in warm season were willing to stay in persistent corpus luteum status. The results showed that with increasing serum glucose, cows trended to return normal status. While with increasing of serum total protein, cows trend to stay in persistent follicle status. As a whole, some biochemical and hormonal factors may play an important role in postpartum anoestrus.

Keywords: ELISA, Inactive ovary, Ovarian cyst, Persistent corpus luteum, Persistent follicle, Postpartum anoestrus

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$$\begin{aligned}
 & \left(\frac{p}{1-p} \right) \log \left(\frac{p}{1-p} \right) \\
 & = \mu + sea_i + B(Glu_{ij} - Gl\bar{u}) + B(pro_{ik} - pr\bar{o}) \\
 & = sea_i \quad = \mu : \\
 & = B(Glu_{ij} - Gl\bar{u}) \quad (i = \quad) \\
 & = B(pro_{ik} - pr\bar{o}) \quad (\quad) \\
 & \quad (\quad)
 \end{aligned}$$

$$\log it = \log \left\{ \frac{p}{1-p} \right\}$$

Odds Ratio

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Pr>Chi-square	Chi-square	df
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Pr>Chi-square	Exp (Est)	df	+
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